



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,563	06/15/2005	Edwin Rijpkema	NL021330	9446
65913	7590	01/13/2009	EXAMINER	
NXP, B.V.			KAO, JUTAI	
NXP INTELLECTUAL PROPERTY DEPARTMENT				
M/S41-SJ			ART UNIT	PAPER NUMBER
1109 MCKAY DRIVE			2416	
SAN JOSE, CA 95131				
NOTIFICATION DATE		DELIVERY MODE		
01/13/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

**Continuation Sheet**

First argument (first paragraph on page 10 of the amendment) regarding key requirements of Moore's contention free guaranteed throughput scheduling:

*"However, the system described by Moore has many key requirements to be able to provide contention free guaranteed throughput scheduling, i.e., flows having reserved appointments at each outbound router/switch [0038], routers in the network that can guarantee specific flow rates for Layer 3 traffic [0046] properly setting congestion window maximum size values [0047], and a defined criteria for packet classification [0048]. There are no teachings in Moore that teach or suggest how the key requirements of the system, that are implemented using a complex apparatus, could be implemented on the simple scheduling apparatus described in Chiussi".*

The applicant shows that Moore's system requires several key requirements listed above in order to enable the contention free guaranteed throughput scheduling. These key requirements are implemented on the routers of Moore's invention in the paragraphs listed above. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the routers of Chiussi's invention in accordance to that described by Moore's invention in order to enable the contention free guaranteed throughput scheduling taught by Moore's invention.

Second argument (second-third paragraph on page 10 of the amendment) regarding combination of window-based flow mechanisms of Moore's invention with the switching device of Chiussi's invention.

The applicant argues that the Office Action attempts to combine the window-based flow mechanisms with the switching device of Chiussi while there are no teachings in Chiussi that indicate that the network protocols used have window-based flow control mechanisms in IP networks. In addition, the applicant stresses the point that "Moore does not disclose how its method of providing contention free guaranteed throughput scheduling could be applied to the weighted-round robin (WRR) scheduler described in Chiussi). However, Chiussi teaches a switching device in an IP network having a flow control mechanism (see paragraph [0003]). Moore teaches switching devices employing window-based or TCP-friendly flow control mechanism (see Moore's abstract and paragraph [0003]). Moore also teaches the scheduling method based on WRR scheduling (see paragraph [0003] and [0005]). Since both inventions teach flow control mechanisms involving WRR employed on switching device in an IP packet network. It would be reasonable to combine the teachings of the two references with reasonable expectation of success.

Last argument (see page 11 of the amendment) regarding the feature of transferring the guaranteed throughput data to one output and best effort data to another output:

The applicant argues that the Office Action states that "the guaranteed throughput data is transferred to one of the plurality of outputs of the switching matrix and the best effort data is transferred to the same output". However, as clearly shown by the Office Action, the passage actually recites "the guaranteed throughput data is

Art Unit: 2416

transferred to one of the plurality of outputs of the switching matrix and the best effort data is transferred to the same output of the switching matrix as well as all other outputs of the switching matrix". That is, the guaranteed throughput data is transferred to at least one of the output of the switching matrix while the best effort data is also transferred to any of the other outputs of the switching matrix as well as the same output where the guaranteed throughput data is transferred to. Therefore, Chiussi does cover the claimed limitation. Lastly, the applicant argues that the combination of Karawi, Chiussi and Moore lacks motivation because "The present application describes the disadvantages of Karawi..." However, the disadvantages shown in the "present application" are not considered as what "one of the ordinary skill in the art at the time of the invention" would be motivated to do". Therefore, the argument is considered invalid.